BUREAU OF ENVIRONMENTAL REMEDIATION/REMEDIAL SECTION POLICY

POTENTIAL APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARs)

BER Policy #BER-RS-015

Date: May 1995, Revised December 2001

Pages: 10

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986, stipulates that the cleanup standards or controls for hazardous substances, pollutants or contaminants be at least in accordance with any applicable or relevant and appropriate requirement (ARAR) designated under state or federal law (CERCLA §121(d)). Applicable requirements are those cleanup standards or controls that are promulgated under state or federal law that specifically address a hazardous substance, pollutant or contaminant, action, location or other situation at a site. Relevant and appropriate requirements are those cleanup standards or controls that do not specifically or fully address a hazardous substance, pollutant or contaminant, action, location or other situation at a site, but address similar situations.

There are three general categories of ARARs: 1) chemical-specific; 2) location-specific; and 3) action-specific. Chemical-specific ARARs are those that pertain to handling or control of certain chemicals based on health concerns or risks. Location-specific ARARs are those that control activities based on the location such as flood plains, wetlands, historic sites, or sensitive ecosystems. Action-specific ARARs are those that govern discrete actions that may include the use of certain technologies for remedial actions or use of certain types of equipment. At its discretion, KDHE may also identify policies or guidelines that are to be considered (TBC) standards for a site. TBC standards have not been promulgated but are used in conjunction with ARARs to achieve acceptable risk levels at a site.

ARARs must be identified during the Remedial Investigation/Feasibility Study (RI/FS) stage or other appropriate or comparable stage of the remedy process. ARARs should also be identified during Removal Actions where practicable, given consideration to the critical nature of the situation. A list of some federal and state laws and regulations is provided below to aid in identifying ARARs for Remedial and Removal Actions for sites in Kansas. The list of federal and state laws identified may not be comprehensive. The responsible party and KDHE project manager should work together to identify all ARARs and other standards that pertain to Remedial Actions for a site.

Abbreviations:

ARAR - Applicable or Relevant and Appropriate Requirements

CFR - Code of Federal Regulations

K.A.R - Kansas Administrative Regulation

U.S.C. - United States Code

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Potentially Applicable Relevant and Appropriate Requirements (Federal)	Description	Comment
Archaeological and Historic Preservation Act of 1974 16 U.S.C. § 469 et seq.	Provides for the preservation of historical or archaeological data which might be destroyed or lost as the result of 1) flooding, building of access roads, relocation of railroads and highways, and other alterations of terrain caused by the construction of a dam by government or persons, or 2) alteration of terrain caused by Federal construction projects or federally licensed activity or program.	Will be applicable if construction projects or alteration of terrain at a site have the potential to destroy historical or archaeological materials.
Clean Air Act (CAA) 42 U.S.C. § 7401 et seq. as amended in 1977 and 1990	Regulates air emissions from area, stationary, and mobile sources. Authorizes EPA to establish National Ambient Air Quality Standards.	May be applicable if remedial actions result in emissions of contaminants to the air.
Standards of Performance for New Stationary Sources (40 CFR 60)	Identifies standards of performance for new stationary sources of air emissions. Provides emission guidelines and compliance times.	Will be applicable for new stationary sources of air emissions.
National Emission Standards for Hazardous Air Pollutants (40 CFR 61)	Identifies emission standards for specific hazardous air pollutants.	Will be applicable if the identified hazardous air pollutants are emitted from a site.
National Emission Standards for Hazardous Air Pollutants for Source Categories (40 CFR 63)	Identifies emission standards for hazardous air pollutants that originate from specific categories of sources.	Will be applicable if the identified hazardous air pollutants are emitted from a specific source category that has been identified.

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Potentially Applicable Relevant and Appropriate Requirements (Federal)	Description	Comment
Clean Water Act (CWA) of 1977 33 U.S.C. § 1251et seq. as amended in 1987	Implements a system to impose effluent limitations on, or otherwise prevent, discharges of pollutants into any waters of the United States from any point source.	Will be applicable if discharges to streams, rivers, or lakes occur from a site.
National Pollutant Discharge Elimination System (NPDES) (40 CFR 122)	Regulates discharges of pollutants from any point source into waters of the United States	Will be applicable if water from the site will be discharged onto land or into streams, rivers or lakes.
Storm Water Discharge Requirements NPDES (40 CFR 122.26)	Provide requirements to obtain a permit to discharge to the storm water sewer system under the NPDES program	Will be applicable if the site has storm water that comes in contact with construction or industrial activity or if the selected remedy involves discharge of treated water to surface waters.
Federal Water Quality Standards (40 CFR 131)	Establishes methods and requirements for states in the development of ambient water quality criteria for the protection of aquatic organisms and/or the protection of human health.	May be indirectly applicable to surface water remediation and is directly applicable to surface water discharges.
General Pre-treatment Regulations for Existing and New Sources of Pollution for Publically Owned Treatment Works (POTW) (40 CFR 403)	Provides effluent limitations and guidelines for existing sources, standards of performance for new sources, and pre-treatment standards for new and existing sources.	Will be applicable if wastewater from a site is discharged to a POTW.
Wetlands Protection (40 CFR 22, 40 CFR 230 to 233, and 33 CFR 320 to 330)	Allows for permitting of discharge of dredged or fill material to the waters of the United States if no practicable alternatives exists that are less damaging to the aquatic environment. Applicants must demonstrate that the impact to wetlands is minimized.	Will be applicable if designated wetlands are impacted by a remedy.
Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 42 U.S.C. § 9601 et seq. as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986	Enacted to provide Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health and the environment. Established a trust fund (i.e., Superfund) to provide for cleanup when no responsible party is identified. Provides for liability of persons responsible for releases of hazardous substances. Established prohibitions and requirements concerning closed and abandoned hazardous waste sites.	Will be applicable if the site is on the EPA National Priorities List (NPL). May be applicable for any site where a release of hazardous substances has occurred.
National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR 300)	Federal government's blueprint for responding to spills or releases of oil and hazardous substances.	

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Potentially Applicable Relevant and Appropriate Requirements (Federal)	Description	Comment
Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 42 U.S.C. § 11001 et seq.	Designated to help local communities protect public health, safety and the environment from chemical hazards. Enables states and communities to prepare to respond to unplanned releases of hazardous substances. Requires facilities at which hazardous substances are present to report the presence of these materials to emergency responders. Requires companies to report the release of hazardous substances.	Will be applicable if hazardous chemicals are stored or used at a facility.
Endangered Species Act of 1973 7 U.S.C. § 136; 16 U.S.C. § 460 et seq.	Provides a program for conservation of threatened and endangered plants and animals and the habitats in which they are found.	Will be applicable if threatened or endangered species, or their habitats are present at or near a site.
Explosives 18 U.S.C. § 847	Regulates commerce in explosives. Requires licensing and permitting, record keeping and reporting for purchase and use of explosives. Provides standards for storage of explosive materials.	Will be applicable if explosives are purchased, stored or used at a site.
Federal Hazardous Materials Transportation Law 49 U.S.C. § 5101 et seq.	Regulates the transportation of hazardous wastes and hazardous substances by aircraft, railcars, vessels, and motor vehicles. Requires employers to train, test and maintain training records for all hazmat employees.	Will be applicable if hazardous materials are transported to or from a site.
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of 1972 7 U.S.C. § 136 et seq.	Provides Federal control of pesticide distribution, sale and use. Allows EPA to study the consequences of pesticide use. Requires users of pesticides to take exams for certification as applicators of pesticides. Pesticide users must register purchases of these materials.	May be applicable if pesticides were distributed, sold or used at a site.
Fish and Wildlife Conservation Act 16 U.S.C. § 2901 to 2911	Action to conserve fish and wildlife, particularly those species which are indigenous to the state.	Will be applicable if significant populations are present at a site or they are affected by site activities.
Fish and Wildlife Coordination Act 16 U.S.C. § 661-667e	The Act allows the Departments of Agriculture and Commerce to assist Federal and State agencies to study the effects of domestic sewage, trade wastes, and other polluting substances on wildlife.	Will be applicable if significant populations are present at a site or they are affected by site activities.
Flood Control Act of 1944 16 U.S.C. § 460	Provides the public with knowledge of flood hazards and promotes prudent use and management of flood plains.	Will be applicable if a site is located on a designated flood plain.
National Historic Preservation Act of 1966 16 U.S.C. § 470 et seq.	Establishes a national registry of historic sites. Provides for preservation of historic or prehistoric resources.	Will be applicable if a site is listed on historic registry and if activities requiring permitting are initiated at a site.

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Potentially Applicable Relevant and Appropriate Requirements (Federal)	Description	Comment
Occupational Safety and Health Act (OSHA) of 1970 29 U.S.C. § 651 et seq.	Enacted to ensure worker and workplace safety. Employers are required to provide workers a place of employment that is free from recognized hazards to safety and health.	Applies to workers and workplaces.
Occupational Safety and Health Standards (29 CFR 1910)	Provides standards for workers and the workplace including: working surfaces; means of egress; ventilation; noise; hazardous materials; personal protective equipment; sanitation; medical services and first aid; fire protection, detection, and suppression; materials handling and storage; machinery and machinery guards; power tools; and welding and electrical equipment. Also requires training for workers.	Will be applicable to workers and workplaces including hazardous waste sites.
Safety and Health Regulations for Construction (29 CFR 1926)	Provides standards for construction activities including: work practices; safety equipment; scaffolding and ladders; fall protection; heavy equipment; excavations; concrete and masonry construction; steel erection; tunnels and shafts; demolition; use of explosives; power transmission and distribution; and overhead protection.	Will be applicable to workers and workplaces where construction activities take place.

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Potentially Applicable Relevant and Appropriate Requirements (Federal)	Description	Comment
Resource Conservation and Recovery Act (RCRA) of 1976 42 U.S.C. § 6901 et seq. as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA) and 1986, the Federal Facilities Compliance Act of 1992, and the Land Disposal Program Flexibility Act of 1996.	Enacted to provide control of hazardous waste by imposing management requirements on generators and transporters of hazardous waste and upon owners and operators of treatment, storage and disposal (TSD) facilities. Also set forth a framework for management of non-hazardous waste. Focuses only on active or future facilities. HSWA requires phasing out land disposal of hazardous waste.	Applies to active hazardous and solid wastes including facilities that treat, store and dispose of these materials as well as generators and transporters of hazardous wastes.
Solid Waste Disposal Facility Criteria (40 CFR 257 - 258)	Regulations apply to owners and operators of facilities that treat, store or dispose of solid wastes	Will be applicable if site activities are analogous to solid waste facility activities.
Standards for Identification and Listing of Hazardous Waste (40 CFR 261)	Provides criteria for identification of hazardous and solid wastes.	Will be applicable for identifying hazardous wastes.
Standards Applicable to Generators of Hazardous Waste (40 CFR 262)	Regulates the manifesting, pre-transport requirements, and record keeping and reporting for hazardous waste generators.	Will be applicable if hazardous waste is generated at a site.
Standards Applicable to Transporters of Hazardous Waste (40 CFR 263)	Establishes standards which apply to persons transporting hazardous waste within the United States if the transportation requires a manifest under RCRA.	Will be applicable if hazardous waste is disposed off site.
Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities (40 CFR 264)	Regulations apply to owners and operators of facilities that treat, store, or dispose of hazardous waste through the use of surface impoundments, waste piles, incinerators, land treatment units, and landfills.	Will be applicable if site activities are analogous to hazardous waste facility activities.
Manifesting, Record Keeping, and Reporting Requirements (40 CFR 264.70 to 264.77)	These standards apply to owners and operators of all facilities which treat, store or dispose of hazardous wastes	Will be applicable if site activities are analogous to hazardous waste facility activities.
Releases from Solid Waste Management Units (40 CFR 264.90 to 264.101)	Regulations apply to owners or operators of hazardous waste treatment, storage or disposal facilities.	Will be applicable if solid waste is stored at a site.
Closure and Post Closure Requirements (40 CFR 264.110 to 264.120)	Facility owner or operator must close a hazardous waste facility in a way that minimizes the need for further maintenance and maximizes the protection of human health and the environment.	Will be applicable upon the closure and post closure of a hazardous waste facility.

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Potentially Applicable Relevant and Appropriate		
Requirements (Federal)	Description	Comment
Resource Conservation and Recovery Act (RCRA)		
Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities (40 CFR 265)	Regulations apply to owners and operators of facilities that treat, store, or dispose of hazardous waste.	Will be applicable if site activities are analogous to hazardous waste facility activities.
Land Disposal Restrictions (40 CFR 268)	Identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.	Will be applicable depending on the type of waste generated at the site.
Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (40 CFR 280)	Establishes regulations relating to underground storage tanks (UST) including: performance standards; spill control; corrosion protection; record keeping and reporting; release detection; environmental investigations of releases; corrective actions; and closure of UST systems.	Will be applicable if underground storage tanks are or were present at a site and if a petroleum release is present. Also provides for environmental assessment at closure of UST systems.
Safe Drinking Water Act (SDWA) of 1974 42 U.S.C. § 300f et seq. as amended in 1986	Established to protect the quality of drinking water in the Unites States. Focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources. The Act authorized EPA to establish safe standards of purity and required all owners or operators of public water supply systems to comply with primary (health-related) standards.	May be applicable, relevant or appropriate at sites where waters that are used or may potentially be used as drinking water supplies are impacted or threatened.
National Primary Drinking Water Regulations and Implementation (40 CFR 141 and 142)	Establishes maximum contaminant levels (MCLs) which are health risk based standards for public water systems.	Will be applicable at the distribution point (i.e., at the tap). Will be relevant and appropriate for groundwater cleanup at sites where potential drinking water sources (aquifers) are impacted.
National Secondary Drinking Water Standards (40 CFR 143)	Establishes welfare-based secondary standards for public water systems.	Will be applicable at the distribution point (i.e., at the tap).
Underground Injection Control Program (40 CFR 144 to 148)	Assures that Underground Injection will not endanger drinking water sources. Provides regulations governing the use of underground injection wells including: identification of the classifications of injection wells; and the permitting, construction, operation, monitoring, testing, and reporting requirements. Also provides requirements for plugging of injection wells.	Will be applicable if underground injection of liquids or air is conducted as part of a site remedy.
Toxic Substances Control Act (TSCA) of 1976 15 U.S.C. § 2601 et seq.	Enacted to give EPA the ability to track industrial chemicals currently produced or imported into the United States. EPA screens these chemicals and may require reporting or testing of those that pose an environmental or human-health hazard. EPA may ban the manufacture and import of those chemicals that pose an unreasonable risk.	Will be applicable if site activities involve handling of toxic substances such as polychlorinated biphenyls (PCBs) or remediation of these substances.

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Potentially Applicable Relevant and Appropriate Requirements (Kansas)	Description	Comment
Ambient Air Quality Standards and Air Pollution Control K.A.R. 28-19-1 to 28-19-801	Regulates air emissions from processing operations, indirect heating equipment, and incinerators. Establishes requirements for Attainment and Non-Attainment Areas. Establishes requirements for Stack Heights. Restricts open burning.	Will be applicable if a remedy results in the release of contaminants to the air.
Asbestos Control K.A.R. 28-50-1 to 28-50-14	Established the requirements for licensing of businesses and examination and certification of asbestos workers. Established requirement for notification of asbestos projects. Establishes work practices for asbestos projects. Establishes rules for disposal of asbestos containing materials.	Will be applicable if asbestos is handled or removed from a site or encapsulated.
Agricultural Chemicals, Commercial Fertilizers, Anhydrous Ammonia, and Chemigation K.A.R. 4-1-1 to 4-1-17, K.A.R. 4-4-1 to 4-4-984, K.A.R. 4-10-1 to 4-10-17, and K.A.R. 4-20-1 to 4-20-15	Requires labeling and registration of agricultural chemicals. Provides regulations for storage and secondary containment, transportation and record keeping for commercial fertilizers and anhydrous ammonia. Requires permitting and certification of operators of chemigation equipment.	Will be applicable if agricultural chemicals, commercial fertilizers or anhydrous ammonia are used at site. Will be applicable if chemicals or animal wastes are applied by chemigation.
Construction, Operation, Monitoring and Abandonment of Salt Solution Mining Wells K.A.R. 28-43-1 to 28-43-11	Regulates the construction, operation, monitoring, testing and abandonment of salt solution mining wells.	Will be applicable if salt solution mining wells are present.
Emergency Planning and Right-to- Know K.A.R. 28-65-1 to 28-65-4	Designated to help local communities protect public health, safety and the environment from chemical hazards. Enables communities to prepare to respond to unplanned releases of hazardous substances. Requires facilities at which hazardous substances are present to report the presence of these materials to emergency responders. Requires companies to report the release of hazardous substances.	Will be applicable if hazardous chemicals are stored or used at a site.
Explosive Materials K.A.R. 22-4-1 to 22-4-4	Requires all contractors to obtain explosive storage site permits before moving, storing or using any explosives or blasting agents at any job site within the state.	Will be applicable if explosives or blasting agents are used or stored at a site.
Hazardous Waste Management Standards and Regulations K.A.R. 28-31-1 to 28-31-16	Identifies the characteristics and listing of hazardous waste. Prohibits underground burial of hazardous waste except as granted by EPA or KDHE. Establishes restrictions on land disposal. Establishes standards for generators or transporters of hazardous waste. Establishes standards for hazardous waste storage, treatment and disposal facilities.	Will be applicable if hazardous wastes are present at a site.
Hydrocarbon Storage Wells and Well Systems K.A.R. 28-45-1 to 28-45-11	Establishes a system for permitting of hydrocarbon storage wells. Establishes requirements for construction, operation and monitoring, and plugging of hydrocarbon storage wells.	Will be applicable if hydrocarbon storage wells are present at a site.

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Potentially Applicable Relevant and Appropriate Requirements (Kansas)	Description	Comment
Kansas Board of Technical Professions	Establishes the requirements for licensing of engineers, land surveyors, geologists and architects.	Will be applicable if the services of a geologist, engineer or land surveyor are required for site
K.A.R. 66-6-1 through 66-14-12		investigations or remediation.
Kansas Drycleaner Environmental Response Act	Enacted to provide funds to assist with assessment and corrective action of former and existing drycleaner facilities. Requires registration of drycleaning facilities	May be applicable if a drycleaner operated onsite.
K.A.R. 28-68-1 to 28-68-9	and compliance with waste management measures.	
Kansas Historic Preservation Act	Provides for the protection and preservation of sites and buildings listed on state or federal historic registries.	Will be applicable if a site or building is listed on the state or
K.A.R. 118-3-1 to 118-3-16		federal historic registry and if activities requiring permitting are initiated at a site.
Kansas Water Appropriations Act	Establishes the requirements for obtaining, maintaining and transferring water appropriations.	Will be applicable if water appropriations are required for
K.A.R. 5-1-1 through 5-10-6 and K.A.R. 5-50-1 to 5-50-8	and dansoring water appropriations.	groundwater remediation.
Mined Land Reclamation	Allows for the reclamation of mined land and associated waters.	Will be applicable if mined land or associated waters are to be
K.A.R. 47-16-1 to 47-16-11		reclaimed.
Non-Game, Threatened or Endangered Species	Identifies Threatened and Endangered Species	Will be applicable if any of the identified species are present at a site.
K.A.R. 115-15-1 to 115-15-4		
PCB Facility Construction Permit Standards and Regulations	Establishes the requirement for permitting of facilities constructed for the treatment, storage or disposal of materials containing polychlorinated biphenyls (PCBs).	Will be applicable if treatment, storage or disposal of materials
K.A.R. 28-55-1 to 28-55-5	Establishes standards for PCB facilities.	containing PCBs occurs.
Pesticides	Requires licensing of pesticide businesses and certification of persons that apply pesticides.	Will be applicable if pesticides are present at a site or application of
K.A.R. 4-13-1 to 4-13-65		pesticides occurs.
Petroleum Products Storage Tanks	Provides requirements for permitting of the installation	Will be applicable if petroleum storage tanks are or were present
K.A.R. 28-44-1 to 28-44-29	and operation of underground storage tanks (USTs). Provides requirements for design and construction of storage tanks. Provides a system for licensing contractors who install and test USTs. Requires implementation of methods for detecting releases and reporting releases from USTs.	at a site.
Radiation K.A.R 28-35-1 to 28-35-363	Regulations require registration of radiation producing devices and licensing of sources of radiation. Provides standards for protection against radiation. Provides requirements for industrial radiographic operations and wireline and subsurface tracer studies.	Will be applicable if radiation producing devices or sources of radiation are present at or are used at a site.

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Potentially Applicable Relevant and Appropriate Requirements (Kansas)	Description	Comment
Solid Waste Management K.A.R. 28-29-1 to 28-29-121 and K.A.R. 28-29-2101 to 28-29-2113	Provides standards for management of solid wastes. Establishes administrative procedures. Establishes the requirement for development and submittal of Solid Waste Management Plans.	Will be applicable if solid waste is generated, stored or disposed at a site.
Spill Reporting K.A.R. 28-48-1 to 28-48-2	Requires reporting of unpermitted discharges or accidental spills. Requires that containment and immediate environmental response measures are implemented. Also provides for technical assistance for mercury-related spills.	Will be applicable if unpermitted discharges or accidental spills occur at a site.
Underground Injection Control Regulations K.A.R. 28-46-1 to 28-46-44	Provides regulations governing the use of underground injection wells including: identification of the classifications of injection wells; and the permitting, construction, operation, monitoring, testing, and reporting requirements. Also provides requirements for plugging of injection wells.	Will be applicable if the remedy involves the injection of fluids or air into the subsurface.
Underground Storage, Disposal Wells and Surface Ponds K.A.R. 28-13-1 to 28-13-9	Regulates the construction and use of underground storage reservoirs, disposal wells and surface ponds for the confinement, storage and disposal of industrial fluids including but not limited to brine. Also pertains to removal of material from surface ponds upon abandonment. Does not include regulations pertaining to oil field activities.	Will be applicable if underground reservoirs, disposal wells or surface ponds are used for storage or disposal of industrial fluids at a site. Will be applicable if use of a surface pond is discontinued.
Voluntary Cleanup and Property Redevelopment Program K.A.R. 28-71-1 to 28-71-12	Provides a mechanism for property owners, facility operators, prospective purchasers, and local governments to voluntarily address contaminated properties with technical and regulatory guidance from KDHE.	May be applicable if a site meets the criteria for acceptance into the Voluntary Cleanup Program
Water Pollution Control K.A.R. 28-16-1 to 28-16-154	Provides regulation of sewage discharge. Establishes pre-treatment standards for industry. Designates uses of rivers and streams. Establishes River Basin Quality Criteria and Surface Water Quality Criteria. Provides for the establishment of Critical Water Quality Management Areas.	Will be applicable if water is to be discharged to state waterways.
Water Well Contractor's License; Water Well Construction and Abandonment K.A.R. 28-30-1 to 28-30-10	Establishes the requirements for licensing of drillers. Regulates drilling activities including the construction of wells.	Will be applicable if drilling and/or well construction or abandonment is conducted at a site.

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